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AN ETHNOBOTANICAL SURVEY OF WILD AROMATIC ETHNOMEDICINAL PLANTS PRESENT IN BODUVARA RAMAR HILLS, DHARMAPURI DISTRICT, TAMIL NADU, INDIA

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ABSTRACT

An intensive field survey of wild aromatic plants present in Boduvara Ramar Hill indicates 45 species of aromatic plants. They are used by the tribal people in day to day medicinal systems. Information on names of plants, parts used and medicinal uses were gathered from local tribal people. The need for this study is to reveal the uses of wild aromatic ethnomedicinal plants because tribal people largely depend on medicinal plants to meet their primary healthcare needs. They use these aromatic plants to treat ailments like cold, cough, fever, headache, stomach-ache, diarrhoea, dysentery, skin diseases, poison bites and diabetes. The wild aromatic ethnomedicinal plants have been listed along with plant parts used with its ethnomedicinal significance.

Key words : BoduvaraRamar Hills, aromatic plants, ethnomedicinal plants, ethnic people.

I. INTRODUCTION

India has a rich assortment of diversity of medicinal and aromatic plants distributed in different geographical and ecological conditions in the country. Out of total 17,500 species of flowering plants in India only 1300 species are of aromatic nature (Uniyal*etal.*, 2002).In India, there are about 550 tribal communities covered under 227 ethnic groups residing in about 5000 villages throughout different forest and vegetation regions (Sikarwar.,2002). India is one of the world's 12 mega biodiversity countries (R. Siva., 2007, P. Kumar Singh.,

2010). The notion of the aromatic plant is even less definitive; the attribute of aroma indicates that the plants having an aroma being fragrant or sweet smelling, while the word aroma is also supposed to imply the taste of the material (Mathe and Franz, 1999). In present study an attempt has been made to collect the aromatic plants from the Boduvara Ramar Hills, Eastern Ghats of Tamil Nadu with their collection number. Besides, observation on habit, habitat, local name, flowering/fruiting and medicinal uses in human welfare have also been made. The present survey was mainly focused on wild aromatic medicinal plants and different parts of the plants and its medicinal value is also studied in the BoduvaraRamar hills. The use of wild aromatic plants has been out of focus throughout the history, at present there is a popular treatment of aroma therapy is a strategy for variety of ailments and these treatments are done by local healers of the Malayali tribal people who migrated from the Kalrayan hills.

II. DESCRIPTION OF STUDY AREA

The present study area is confined to a major range in BoduvaraRamar Hills of the Eastern Ghats that is rich in Biodiversity.Eastern Ghats,a broken chain of mountains in the Indian peninsular extends from Coromandal in West Bengal to Kanyakumari in Tamil Nadu, is about 1600 long in North-South direction.The area of investigation approximately lies between N11º53.557'to E078 º25.34.The study area Boduvara Ramar Hills is located in Dharmapuri district,Tamil Nadu,India.The elevation of the hill range between 1222-1300m above mean sea levels(msl.)The mean annual temperature in the study area ranges from 12ºC to 35ºC.The area receives an average rainfall of 200 mm annually.Present investigation was conducted in BoduvaraRamar Hills and the field trips were conducted during December 2014 to October 2015.

III.MATERIALS AND METHOD

The present work is based on the intensive survey of aromatic plants present in Boduvara Ramar Hills. The information was gathered from the local tribal people,an aboriginal who reside near the Boduvara Ramar Hills. Several field visits were also conducted to the tribal residing areas of the study to collect data on aromatic medicinal plants commonly used by them.The dominance of aromatic plants was recorded on visual basis for the presence and absence of species.The plant specimens were assigned collection numbers;their localities and other necessary field information were recorded in field data book.The medicinal plants were photographed and sample specimens were collected for preparation of herbarium(Gamble and Fischer 1915-1936;Mathew 1983;Nair and Henry 1983;Henry et al.1987 and 1989;Chandrabose and Nair 1988;Gamble 1996).During the visit local name,medicinal and traditional uses of plants by tribal people were noted on the spot and confirmed with the help of literature.The specimens were pressed dried,prepared herbarium and identified using floras(Srivastava,1976;Singh et al.,2000).Voucher specimens have been deposited in the herbarium of Centre for Biodiversity and Forest studies, Periyar University, Salem, Tamil Nadu.

IV. RESULTS AND DISCUSSION

The aromatic plants collected during the investigation are listed in (Table:1). It shows the Binomial Name of the wild aromatic ethnomedicinal plants arranged in

alphabetical order followed by family names, vernacular names or English names, aromatic plant parts used and its therapeutic uses. The present survey enumerated that there are 45 of wild aromatic medicinal plants species belonging to 24 families. During the field trip the species viz., *Lantana camera*, *Hemidesmusindicus* (L.) R.Br, *Murrayapaniculata* L., *Aloe vera*L., *Leucasaspera* Spreng, *Alternantherasessilis*(L.)R.Br.ex DC, *Annonasquamosa*L., *Embilicaofficinalis* Gaertn were found to be abundantly distributed throughout the hill while the species like *Cymbopogan citrates* Stapf., *Piper nigrum* L., *Syzigiumcumini* Walp., *Pterocarpussantalins*L.f showed restricted distribution.

V.CONCLUSION

The findings of the present investigation specify that the wild aromatic plant species are distributed in the study area abundantly. The exploitation of aromatic plants may threaten to some plant species. The medicinal and aromatic plants have future potential for the development of herbal drugs for various disease ailments. The ultimate aim and scope of this study is the need to explore the wild aromatic medicinal plants and conservation of aromatic plant diversity which serves the discovery of the new drugs. This study will positively contribute the further in the novel drug discovery and conservation of aromatic plant resources.

Table: 1 List of Wild Aromatic ethnomedicinal plants present in Boduvara Ramar Hills, Dharmapuri, Tamil Nadu

S.No	Binomial Name	Family	Vernacular/Local name	Parts used	Therapeutic uses
1.	*Acoruscalamus*	Araceae	Vasambu	Rhizome	Cancer, Pneumonia
2.	*Aeglemarmelos*	Rutaceae	Vilvam	Bark&Leaf	For Blood purification
3.	*Aloe vera*L.	Liliaceae	Katralai	Entire plant	For skin and hair
4.	*Alpinacalcarata*R	Zingiberaceae	Chittaratthai	Rhizome	Digestion and Fever
5.	*Alternantherasessilis*(L.)R. Br.ex DC	Amaranthaceae	Mullukeerai	Leaves	For ophthalmic diseases
6.	*Annonasquamosa*L.	Annonaceae	Vana seethe	Bark and young leaves	Antibacterial agent
7.	*Artimisianilagirica*L	Asteraceae	Maasipatri	Whole plant	Asthma, Fever and Cough
8.	*Centratherumanthelmintic um*(L.)Kuntze	Asteraceae	Kattusamanthi	Whole plant	Anthelmintic
9.	*Cinnamomummacrocarpu m*Hook.f	Lauraceae	Lavangapattai	Bark	Diarrhoea, Dysentery

10.	*Clausena dentate*Burm.	Rutaceae	KattuKaruveppilai	Leaf	Used as medicine
11.	*Curcuma aromaticum*sal.	Zingiberaceae	Kasturimanjal	Rhizome	Skin disease, Cosmetics
12.	*Cymbopogan citrates* Stapf.	Poaceae	Lemon grass	Whole plant	Fever,Head ache
13.	*Embilicaofficinalis*Gaertn	Euphorbiaceae	Nelli	Leaves and Fruit	Antioxidant,Tonic
14.	*Gloriosasuperba*L.	Liliaceae	KattuKilangu	Rhizome	Snake bite and Rheumatic pain
15.	*Gymnemasylvestre*(Retz.) Schult	Asclepiadaceae	Sarkaraikolli	Leaves	For Diabetes and Snake bite
16.	*Hemidesmusindicus* (L.) R.Br	Asclepiadaceae	Nannari	Root	Vomiting and Nephropathy
17.	*Jasminumangustifolium* Vahl.	Oleaceae	Vanamalligai	Flowers and leaves	Cosmetics
18.	*Lantana camara* L.	Verbinaceae	Arisimalar	Whole plant	Tumours and Swellings
19.	*Leptadeniareticulatala* W&A	Asclepiadaceae	Palaikodi	Roots	Skin disease and inflammation
20.	*Leucasaspera*Spreng	Lamiaceae	Tumbai	Leaves and Flowers	Psoriasis and Cough

21.	*Mesuaferrea*L.	Guttiferaceae	Nangu	Fruit	Stomach Ulcer and Cancer
22.	*Murrayapaniculata*L.	Rutaceae	KaattuKarivepilai	Leaf and bark	Carminative
23.	*Myrsticadactyloides*Gaert.	Myristicaceae	Kattujatikkai	Leaf and Fruit	As sedative,cough and fever
24.	*Naringacrenulata*Roxb.	Rutaceae	Magavilvam	Whole plant	For fertility of woman
25.	*Ocimumcanum*Sims.	Lamiaceae	Naithulasi	Leaves	Fever and Cardio tonic
26.	*Ocimum sanctum* L.	Lamiaceae	Thulasi	Leaves	Bronchitis and Skin disease
27.	*Piper hymenophyllum*Miq.	Piperaceae	Vaal thippili	Fruit	Carminative,analgesic
28.	*Piper longum*L.	Piperaceae	Thippili	Fruit	Diarrhoea,Piles and Malarial fever
29.	*Piper nigrum*L.	Piperaceae	Milagu	Fruit	Cold and Cough
30.	*Premnacorymbosa* R.&Willd	Verbenaceae	Minnakeerai	Leaves	Fever and Tumors
31.	*Pterocarpussantalins*L.f	Caesalpinaceae	Sivappuchandanam	Heart wood	Cosmetics and Medicines

32.	*Pterolobiumhexapetalum*R.Br	Caesalpinaceae	-	Flower	-
33.	*Rubiacordifolia* L.	Rubiaceae	-	Leaves and Roots	Blood purifier
34.	*Rutagraveolens*L.	Rutaceae	-	Leaves	Antiseptic
35.	*Santalum album* L.	Santalaceae	Sandal	Soft wood	For medicine and Cosmetics
36.	*Sapindusemarginatus*Vahl W&A	Sapindaceae	Ponanaga	Fruit	Used as Soap
37.	*Smilax zeylanica*L.	Smilaceae	-	Whole plant	Fever and Cold
38.	*Sphaeranthusindicus*L.	Asteraceae	Vanathumbai	Whole plant	Diuretic and Anthelminthic
39.	*Symplocosracemosa*L.	Symplocaceae	-	Leaves	-
40.	*Syzigiumcumini*Walp.	Myrtaceae	Naval maram	Fruit and Bark	Diabetes and medicines
41.	*Thymus vulgaris* L.	Lamiaceae	Thyme	Whole plant	Cold and Cough
42.	*Utileriasalicifolia*Bedd.	Asclepiadaceae	Kurumagali	Rhizome	Health tonic and Medicine

43.	*Uvarianarum*Wall	Annonaceae	-	Leaf and Bark	-
44.	*Vateriaindica*L	Ancistrocladaceae	Vellakunguliam	Resin	Insect repellent
45.	*Vetiveriazizanoides*Nast	Poaceae	Vetiver	Root	Stomach ache and Diaphoretic

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